

ABSTRACT OF THE DISCLOSURE

The present invention relates to polynucleotide and polypeptide molecules for PAR4, a novel member of the protease-activated receptor family. The polypeptides, and polynucleotides encoding them, mediate biological responses and/or cellular signaling in response to proteases. Protease cleavage of PAR4 exposes a PAR4 extracellular amino terminal portion that serves as a ligand for the PAR4 receptor. PAR4 may be used as a target in drug screening, and further used to identify proteinaceous or non-proteinaceous PAR4 agonists and antagonists. The present invention also includes antibodies to the PAR4 polypeptides.